What Is the Penny Buying for South Carolina?

Nineteenth Annual Reporting on the South Carolina Education Improvement Act of 1984:

Comparison of High School Report Card Variables with Types of High School Class Schedules

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Comparison of High School Report Card Variables with Types of High School Class Schedules

Prepared by the
Office of Research
South Carolina Department of Education

Inez M. Tenenbaum
State Superintendent of Education

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Introduction

Education reform efforts in South Carolina began twenty-five years ago. In 1978, the Basic Skills Assessment Act provided for standardized testing of students. The Educator Improvement Act of 1979 increased the standards for teachers. The Education Improvement Act (EIA), passed in 1984, increased the state sales tax by a penny in order to provide funding for seven educational goals:

- raising student performance,
- teaching and testing basic skills,
- evaluating the teaching profession,
- improving leadership,
- implementing quality controls and rewarding productivity,
- creating more effective partnerships, and
- providing school buildings.

Subsequent reform legislation built upon and expanded these goals funded by the penny increase in the sales tax. EIA efforts to raise student and teacher performance were enhanced by the Target 2000–School Reform for the Next Decade Act (1989), the Early Childhood Development and Academic Assistance Act (1993), and the School-to-Work Transition Act (1994).

The Education Accountability Act of 1998 added accountability measures to the goals introduced by the EIA and subsequent reform legislation. Under the Education Accountability Act, the cornerstone of South Carolina's accountability effort is the annual school report card. The production of the annual school report cards is funded with EIA monies.

In order to receive periodic reports on the reform initiatives, the General Assembly incorporated into the EIA the requirement that the State Board of Education provide to the General Assembly by December 1 of each year an annual assessment of the Act. This report, the *Nineteenth Annual Reporting on the South Carolina Education Improvement Act of 1984: Comparison of High School Report Card Variables with Types of High School Class Schedules,* compares information contained in the high school report cards with the daily class schedules used by high schools in South Carolina.

Review of the Literature

Traditionally, high school class schedules have included six or seven periods of instruction each day. Classes met for approximately 50 minutes, and a class that was offered for one Carnegie unit of credit met each day for the entire school year. Classes offered for a half unit met for one semester.

As J. Allen Queen has explained, educators began to question the traditional high school schedule "in 1983, when *A Nation at Risk* reported that American students were academically lagging behind their counterparts in a number of other industrialized nations. In response, educators began to examine alternatives that might result in higher student achievement. Many educators came to see the restructuring of schools, including their schedules, as a central way of seeking improvement" (Queen 2000, 215). In 1994, the National Education Commission on Time and Learning (NECTL 1994) published a report recommending the use of block scheduling in the nation's schools. Likewise, in 1996, the National Association of Secondary School Principals recommended that schools implement "flexible uses of time" and suggested block scheduling as an "exemplary model" (Hackmann 1999, 69).

By 1999, approximately 30 percent of secondary schools in the United States were using block scheduling (Rettig and Canady 1999). In North Carolina, almost 72 percent of high schools used a block schedule in the 1999–2000 school year (Zhang 2001). Approximately 44 percent of Georgia high schools in 2000–01 were on a block schedule (Georgia Department of Education 2001), and in the fall of 2002, administrators in 86 percent of South Carolina high schools reported that they were following a block schedule (see appendix A).

The two primary types of block schedule are the "4X4 Block" and the "A/B Block." In the 4X4 schedule, classes typically are offered in 90-minute blocks each day for a semester. Students take four courses during the first semester and four different courses during the second semester. Courses offered for a half unit meet for half of a semester. In an A/B block schedule, also known as the alternating day schedule, classes typically are offered in four 90-minute blocks each day, with different sets of classes meeting on alternate days. As a result, students take four courses on day "A" and four different courses on day "B" for the entire year. Courses offered for a half unit meet for half the academic year, or one semester.

Many school administrators have found that block schedules can be modified to suit the specific needs of their particular school. Modified block schedules are those in which most of the classes at a school adhere to one type of schedule while certain other classes operate on a different schedule. For example, a 4X4 block schedule with 90-minute class periods of either type may incorporate a "split block," during which students take two courses for 45 minutes a day for the entire year, thus combining features of a block schedule and a traditional schedule.

In South Carolina, administrators in 70 percent of 4X4 block-schedule schools and 49 percent of A/B block-schedule schools modified their schedules in 2001–02 to meet their schools' needs. The modification most widely used was the scheduling of math and English classes to meet daily all year for specific groups of students. The scheduling of Advanced Placement (AP) classes over the whole school year was also a popular modification. Similar modifications to the A/B block schedule were reported (see appendix B).

ADVANTAGES OF BLOCK SCHEDULING

Proponents of block scheduling cite benefits to students and teachers as well as positive effects for the classroom learning environment and school climate. A review of the literature reveals many advantages.

Currently 24 Carnegie units are required for high school graduation in South Carolina. A block schedule, over four years, can allow a student to earn up to 32 units. This flexibility allows schools the ability to provide more elective courses tailored to the needs of the students. These may include fine arts, occupational, or remedial courses; test preparation or study skills courses; higher-level academic courses; or college-credit courses (Rettig and Canady 1999, Edwards 1995, North Carolina Department of Public Instruction 1998). Off-site employment or internships are more easily accommodated under the block schedule (Coeyman 2002). In addition, a student who fails a course on the block schedule has more opportunities to make up the course and graduate with his or her class. On a traditional schedule, once a student realizes that he or she is failing more than one class, there is little incentive for that student to remain in school. With the 4X4 block schedule, however, the student can begin again the next semester (Deuel 1999, O'Neil 1995). Moreover, students have fewer classes to prepare for daily.

With fewer students to teach each day, teachers have the opportunity to become more involved with the students—to develop a rapport with them and to identify their individual strengths and weaknesses—and to implement different instructional strategies to accommodate their needs (Veal and Flinders 2001, Deuel 1999). Longer class periods allow teachers to implement a variety of student evaluation techniques (Deuel 1999). In addition, a longer class period results in a longer planning period for teachers. Thomas Shortt and Yvonne Thayer (2000) indicate that with this time, teachers have the opportunity to take a break for a few minutes, contact a parent, or collaborate with other teachers in addition to organizing material for the next class. Teachers also have fewer classes to prepare for daily.

Karen Irmsher (1996) describes the traditional schedule as frantic and fragmented with students moving from activity to activity every 45 to 50 minutes. Block schedules enhance the classroom learning environment by providing time to explore subjects in depth and increasing student-teacher interaction and discussion (Coeyman 2002, Bukowski and Stinson 2000, Deuel 1999). National standards for math and science call for "sufficient instructional time for inquiry-oriented activities, accompanying discussion, and explanation of concepts involved" (Durkin 2003, 1).

At the secondary level the National Research Council science standards call for 300 minutes of science instruction per week, and the math standards established by the National Council of Teachers of Mathematics call for 60 minutes of mathematics instruction per day for all grades (Durkin 2003). These time frames are not easily accommodated in the traditional schedule. With a longer class period, teachers have the opportunity to utilize creative instructional strategies that are difficult or impossible during a 50-minute period. For example, English teachers can have students spend significant amounts of time engaging in group discussions or working on projects that are impractical in a traditional period. Students not only have more time in the school library for in-depth research but also have enough time to actually complete significant lab experiments in science classes (Farmer 1999, Irmsher 1996).

The reduction in discipline problems under a block schedule improves school climate. Studies by Rettig and Canady (1999), Shortt and Thayer (1999), and Hansen, Gutman, and Smith (2000) have shown that the block schedule results in fewer discipline referrals. According to Irmsher (1996) the majority of disciplinary problems occur while students are changing classes. Shortt and Thayer (2000) explain that with fewer transitions throughout the school day, "students have fewer opportunities to create nonproductive situations" (10). A study of physical education teachers indicates that even if a student is a discipline problem, not having to deal with that student every day or having to deal with him or her only for one semester reduces stress on the teacher (Bukowski and Stinson 2000).

DISADVANTAGES OF BLOCK SCHEDULING

Other researchers assert that the traditional schedule is superior to the block schedule because it provides more total instructional time. A student who attends class for 50 minutes each day for a 180-day school year receives 150 hours of instruction. One who attends class for 90 minutes per day for 90 days (a typical block schedule) receives 135 hours of instruction. The difference of 15 hours represents 10 percent less instructional time and is equivalent to 18 days of instruction in a traditional schedule. Several studies have reported that the pace at which a teacher teaches increases under block scheduling. Teachers feel that they are squeezing a yearlong class into one semester. Even students feel that teachers rush to cover all the material (Veal and Flinders 2001).

The 4X4 block schedule compresses instruction into half of the school year, while A/B block and traditional schedules spread instruction across a longer period of time. The 4X4 block is the schedule most criticized because it results in gaps in the academic sequence. According to Marjorie Coeyman (2002), students on the 4X4 block schedule can have difficulty with subjects such as math, foreign languages, or the performing arts that require regular repetition and are dependent on a particular sequence of lessons. A student may pass French 1 in the fall of his or her freshman year and not take French 2 until the spring of the sophomore year. Mona Hamdy and Ted Urich (1998) speculate that a break of a semester or more between two sequential courses may necessitate long review sessions at the beginning of the next-level course.

The length of block schedule classes has caused some concern that "students in grades nine and ten might not be mature enough to successfully perform academic tasks during extended class periods" (Hamdy and Urich 1998, 9). Also of concern is the fact that many teachers are not trained to engage students for as long as 90 minutes (Coeyman 2002). Teachers may have difficulty revising their teaching techniques and incorporating new methodologies better suited for the longer class period (Hamdy and Urich 1998). As a result, some classes may be nothing more that 50 minutes of lecture, with the remainder of time spent on homework assignments.

The ability of students to accrue in three years the number of credits required for graduation has caused concern that some students will attempt to graduate a year early but will lack the maturity to effectively pursue a college degree or to enter the job market (Bassett n.d.). Another concern about block scheduling is the difficulty students experience in catching up with their work after only one or two absences from class. This situation, some educators are concerned, may increase dropout rates (Bukowski and Stinson 2000, Coeyman 2002, Liu and Dye 1998). The problems

that arise when a student transfers between a block-schedule and a traditional-schedule school are another concern of educators (Bukowski and Stinson 2000, Coeyman 2002).

STUDENT ACHIEVEMENT UNDER BLOCK SCHEDULING

Research on the relative effectiveness of the types of schedules with regard to student achievement has yielded contradictory results. Large-scale studies in Canada and the United States have reported both higher and lower test scores. Michael Rettig and Robert Canady asserted in 2001 that "at this time we believe we can be fairly safe in stating that block scheduling will not have a negative effect on student achievement. . . . We also cannot say that it will necessarily improve achievement either" (81).

A 1998 study by the College Board compared the Biology, Calculus AB, U.S. History, and English Literature AP Examination scores to types of class schedules. The researchers concluded the following:

> the evidence . . . suggests that students who are taught in compressed schedules score lower on all four AP Examinations than those who receive year-long instruction. For courses on compressed schedules (fall or spring), there is some evidence that higher AP Examination grades may be obtained when testing immediately follows instruction. Finally, there is also some supporting evidence that students obtain higher AP grades when more time is devoted to instruction. (College Board 1998, 10)

Researchers reviewing the American College Test (ACT) assessment scores of 450 high schools in Illinois and Iowa, before and after implementation of block scheduling, found that schools on the traditional eight-period-day schedule "demonstrated a slight upward trend in mean ACT scores over time regardless of content area." For schools on the 4X4 block schedule, the mean ACT scores were at their highest at or near the year of implementation, generally declined for three years, and, with the exception of reading scores, "rebounded somewhat" in the fourth year following implementation. The mean ACT scores for alternating-day schools varied, "but increased little over time" (Harmston et al. 2003, ii).

When Georgia researchers compared the math and English scores from the Georgia High School Graduation Tests (GHSGT) for schools three years before and after the schools implemented block scheduling, the results varied. Over time, 14 schools experienced an increase in test scores, and 8 schools experienced a decrease. Test scores for 3 schools remained the same over time, and the results for 15 schools were mixed. The Georgia researchers concluded, "It appears that at the very least, block scheduling is doing no harm to these schools' performance on the GHSGT" (Georgia Department of Education 2000, 10).

A study conducted by the North Carolina Department of Public Instruction found that, in a comparison of end-of-course test scores for students enrolled in 4X4 block schedule and traditional schedule courses, the 4X4 block-schedule students scored significantly higher on the Algebra 1 test. Scores for English 1; Biology; Economic, Legal, and Political Systems; and U.S. History were not statistically significant between the two schedules (Zhang 2001).

A 1999 Texas study compared schedule type to specific student performance measures: the percentage of students passing the TAAS (Texas Assessment of Academic Skills), students' AP and SAT/ACT participation and performance, grade-level retention rates, and dropout rates. The researchers concluded that "the type of schedule the school used did not bear a statistically significant relationship to overall student performance. How effectively students and teachers engage in the teaching-learning process appears to matter much more than the length of class periods" (Texas Education Agency 1999, 24).

Data Sources

This study investigates the relationship between high school class schedules and the data amassed for South Carolina's school report cards, which are issued annually for each public school in the state. A school report card contains a variety of information elements, including data on student performance; descriptive data concerning the school, its teachers, and its students; and perceptual data collected from teachers, students, and parents. Report card data are drawn from several sources, including test files, financial data systems, and surveys that are conducted each spring and summer.

Performance data are summarized in the form of an "absolute rating" that makes it possible to compare the overall performance of schools. Absolute ratings are based on numerical indices that range from 1.0 to 5.0. In 2002, the mean absolute rating for high schools was 3.0. The "improvement rating" is calculated by finding the difference between the absolute ratings assigned to the school in successive years. Improvement ratings have a theoretical range from –4.0 to 4.0, although the observed range will ordinarily be much smaller. In 2001–02, the improvement ratings for high schools ranged from –1.1 to 1.3, with a mean of 0.

Class schedules were identified through a survey conducted in fall 2002. The survey asked high school principals to specify the type of schedule used by the school in the current year, to describe any modifications to the basic schedule that the school had implemented, and, if the schedule for the 2002–03 school year was different from the one used the previous year (2001–02), to specify the schedule that was used during the previous year. In spring 2003, a second survey was conducted. High school principals were asked to specify the reasons that the school chose to adopt a particular type of schedule.

Results

Except for the data derived from the 2003 survey (reasons for selecting a particular type of class schedule), data were available for all public high schools in the state. Since the data came from the total population of high schools rather than from a sample, tests of significance—which are used in the process of generalizing from a sample to a more general population—were not appropriate. The results consist of descriptive data concerning public high schools in South Carolina in the 2001–02 school year.

TYPES OF SCHEDULES

Schedules were classified as traditional, A/B block, 4X4 block, traditional modified, A/B modified, or 4X4 modified. Almost two-thirds (63.4%) of the high schools in the state utilize some form of 4X4 block schedule, and another 24.6 percent of the schools follow a pure or modified form of A/B block. Only 23 schools (12.0%) follow traditional schedules. The results appear in table 1.

TABLE 1

Schools by Type of Schedule, 2001–02

Type of Schedule	Pure Schedule	Modified Schedule	Pure and Modified Schedules Combined	
	Number of Schools	Number of Schools	Number of Schools	Percentage of All Schools
Traditional	21	2	23	12.0%
A/B block	24	23	47	24.6%
4X4 block	36	85	21	63.4%

Only 8.7 percent of schools using the traditional schedule modify the schedule in some way. In comparison, 48.9 percent of schools with A/B block schedules and 70.2 percent of schools with 4X4 block schedules modify their schedules.

Subsequent tables in this report combine the results for pure and modified schedules into one of the three primary categories, unless there is a reason for discussing the results separately.

TYPE OF SCHEDULE AND SCHOOL LOCATION AND SIZE

Table 2 contains the number of schools of each type classified by geographical location and population characteristics such as population density. For purposes of this report, geographical location is defined as *urban*, *suburban*, *small town*, and *rural* (see appendix C for the definitions of these terms). These classifications are derived from those used in the Common Core of Data (CCD) by the National Center for Educational Statistics.

TABLE 2

Schools by Schedule Type and Location

Type of Schedule	Urban		Suburban		Small Town		Rural		Total
	Number	%	Number	%	Number	%	Number	%	
Traditional	5	21.7	5	21.7	3	13.0	10	43.5	23
A/B block	9	19.1	10	21.3	10	21.3	18	38.3	47
4X4 block	15	12.4	29	24.0	22	18.2	55	45.5	121
State total:	29	15.2	44	23.0	35	18.3	83	43.5	191

Schools with traditional schedules are more likely to be located in urban settings than are those with the 4X4 block schedule. Schools with A/B block schedules are more likely than the others to be found in small towns and less likely to be located in rural areas.

Schools also can be classified in terms of the region of the state in which they are located. These data are reported in table 3.

TABLE 3

Percentage of Schools by Schedule Type and Geographical Region

School Districts	4X4 Block	A/B Block	Traditional
Region A—Aiken; Allendale; Barnwell 19, 29, and 45; Edgefield	0.0%	33.3%	66.7%
Region B—Anderson 1, 2, 3, 4, and 5; Oconee; Pickens	26.7%	73.3%	0.0%
Region C—Beaufort; Colleton; Hampton 1 and 2; Jasper	42.9%	42.9%	14.3%
Region D—Berkeley, Dorchester 2 and 4	88.9%	0.0%	11.1%
Region E—Charleston	38.5%	61.5%	0.0%
Region F—Lexington 1, 2, 3, 4, and 5; Richland 1 and 2	85.7%	14.3%	0.0%
Region G—Clarendon 1, 2, and 3; Darlington; Dillon 1, 2, and 3; Florence 1, 2, 3, 4, and 5; Lee; Marion 1, 2, and 7; Marlboro; Sumter 2 and 17; Williamsburg	92.9%	7.1%	0.0%
Region H—Georgetown, Horry	92.3%	7.7%	0.0%
Region I—Greenville	66.7%	13.3%	20.0%
Region J—Bamberg 1 and 2; Calhoun; Orangeburg 3, 4, and 5	45.5%	45.5%	9.1%
Region K—Chester; Chesterfield; Fairfield; Kershaw; Lancaster; York 1, 2, 3, and 4	75.0%	15.0%	10.0%
Region L—Cherokee; Spartanburg 1, 2, 3, 4, 5, 6, and 7; Union	69.2%	0.0%	30.8%
Region M—Abbeville; Greenwood 50, 51, and 52; Laurens 55 and 56; McCormick; Newberry; Saluda	42.9%	35.7%	21.4%
State total:	63.7%	24.2%	12.1%

The schools that use a particular type of schedule are not spread evenly across the state. Differences are apparent among the geographical regions. In the regions D, F, G, and H (see

table 3, above), over 85 percent of the schools follow 4X4 block schedules. Region B, with 73 percent, has the largest percentage of A/B block schedule schools. Five of the regions have no schools that follow traditional schedules. Region A is the only group of districts in which no schools are using the 4X4 block schedule. Regions D and L have no schools on the A/B block schedule.

The type of schedule used by a school also can be compared with the number of children attending that school. Table 4 contains the types of schedules used by schools of varying size as measured by the numbers of students enrolled in those schools.

TABLE 4

Percent of Schools by Schedule Type and School Size

School Size (Percentage Statewide)	4X4 Block	A/B Block	Traditional
Fewer than 400 students (16%)	11.6%	23.9%	21.7%
400–599 students (16%)	16.5%	13.0%	17.4%
600–1,299 students (41%)	41.3%	45.7%	30.4%
1,300–1,799 students (19%)	22.3%	10.9%	21.7%
1,800 students or more (8%)	8.3%	6.5%	8.7%

A 4X4 block schedule is not often used in very small schools, and A/B blocks are used relatively infrequently in large schools.

TYPE OF SCHEDULE AND STUDENT PERFORMANCE

The school report cards summarize student performance with an absolute rating that is based on performance on three criteria: (1) the percentage of first-time tenth-grade test-takers who met the standard (i.e., passed) all parts of the BSAP exit exam in the spring of the year, (2) the percentage of first-time tenth-grade test-takers who met the standard on all sections of the BSAP exit exam by spring two years after the initial administration, and (3) the percentage of students in the high school graduating class who had grade point averages (GPAs) equivalent to a B or higher and who had scores of at least 1050 on the SAT or at least 22 on the ACT. The improvement rating represents the difference in the absolute ratings assigned in successive years. Table 5 contains the mean absolute and improvement ratings for schools by the type of class schedule.

TABLE 5

Mean Absolute and Improvement Ratings by Schedule Type

Type of Schedule	Mean Absolute	Mean Improvement
Traditional	3.1	.01
A/B Block	3.1	.06

4X4 Block	2.9	.01

In schools with pure schedules, the differences among mean absolute ratings are greater: traditional, 3.0; A/B block, 3.1; and 4X4 block, 2.7. Mean improvement indices are 0 in schools with traditional schedules, .14 in those with A/B blocks, and –.06 in schools with 4X4 block schedules.

Schools with traditional and A/B block schedules have a higher mean absolute rating than do schools with 4X4 block schedules. Schools with these schedules have mean ratings that would be classified as "good" on the school report cards, while the mean rating of schools with 4X4 block schedules would be classified as "average."

Mean improvement indices are low for all schools, although the mean for schools with A/B schedules is higher than the means for schools with the other two schedule types. On school report cards, improvement ratings are reported to a single decimal place. Therefore, the means would be reported as 0 for schools with traditional and 4X4 block schedules and .1 for those with A/B block schedules. Improvement levels for the first two groups would be classified as "below average," while the mean for schools with A/B blocks would be classified as "average." Tables 6 and 7 contain distributions of absolute and improvement ratings for schools with each type of schedule.

TABLE 6

Percentage of Schools by Schedule Type and Absolute Rating

Type of Schedule	Unsatisfactory	Below Average	Average	Good	Excellent
Traditional	13.0%	8.7%	13.0%	30.4%	34.8%
A/B Block	11.1%	15.6%	11.1%	33.3%	28.9%
4X4 Block	14.4%	8.5%	11.9%	41.5%	23.7%

Over a third of the schools with traditional schedules received absolute ratings of "excellent," while 28.9 percent of those with A/B block schedules and 23.7 percent of those with 4X4 block schedules received ratings of "excellent." However, when ratings of "good" and "excellent" are combined, the differences between the groups are minimal.

TABLE 7

Percentage of Schools by Schedule Type and Improvement Rating

Type of Schedule	Unsatisfactory	Below Average	Average	Good	Excellent
Traditional	22.7%	9.1%	4.6%	31.8%	31.8%
A/B Block	28.9%	11.1%	4.4%	31.1%	24.4%
4X4 Block	19.7%	13.7%	6.0%	29.1%	31.6%

Schools with traditional schedules were more likely than were those with other schedules to have improvement ratings of "good" or "excellent." Although only 11.1 percent of schools with A/B block schedules received an absolute rating of "unsatisfactory," 28.9 percent of the same schools received an improvement rating of "unsatisfactory."

The components of the absolute rating can be examined separately. The performance of students as measured by each of the three criteria that compose the absolute rating appears in table 8.

TABLE 8

Performance on the Criteria that Compose the Absolute Rating by Schedule Type

Type of Schedule	Percentage of First-Time BSAP Exit Exam Test-Takers Meeting Standard	Longitudinal BSAP Exit Exam Passing Rate	Percentage of Students Meeting Specific GPA and SAT or ACT Score Requirements
Traditional	67.8%	91.4%	22.0%
A/B Block	66.5%	91.7%	21.1%
4X4 Block	63.4%	92.5%	17.2%

The differences among the three groups are not great. However, except for the longitudinal BSAP exit exam passing rate, students in schools with traditional schedules had higher levels of performance than did those with other schedules, and those in schools with 4X4 block schedules had lower levels of performance.

Conclusions Concerning Student Performance

Although the multiple analyses are not completely consistent, it appears that overall the schools with traditional schedules have higher levels of performance, as measured by the absolute ratings on the school report cards. They have higher levels of performance on two of the three criteria on which the absolute ratings are based. Schools with A/B block schedules have higher mean improvement ratings than did schools with other types of schedules.

TYPE OF SCHEDULE AND PERCEPTIONS OF THE SCHOOL

Annually, surveys are used to assess teachers', parents', and students' perceptions of the school. Each survey consists of more than forty statements, and the respondent is asked to indicate a level of agreement with each statement. In each case, a response of "agree" or "mostly agree" indicates satisfaction with the characteristic that is being assessed. Surveys are completed by all students in a specific grade, the parents of the students surveyed, and all of the teachers at the school.

The consultants who developed the instrument believe that the items measure three factors: the school's learning environment, the school's social and physical environment, and home-school relations. The items that are believed to measure each factor are grouped together on the survey

form, and at the end of each section, there is an item concerning satisfaction with the overall factor. The parent, student, and teacher forms contain the same items, although the wording differs as appropriate.

The report card data reflect the percentage of respondents who indicated that they "agree" or "strongly agree" with the statements that address the overall factors. The results appear in tables 9 through 11.

TABLE 9

Mean Percentage of Persons Satisfied with the School's Learning Environment by Schedule Type

Type of Schedule	Teachers	Students	Parents
Traditional	84.0%	61.9%	70.8%
A/B Block	82.5%	66.2%	75.8%
4X4 Block	81.5%	65.7%	75.0%

TABLE 10

Mean Percentage of Persons Satisfied with the School's Social and Physical Environment by Schedule Type

Type of Schedule	Teachers	Students	Parents
Traditional	87.7%	73.2%	63.3%
A/B Block	83.4%	74.6%	69.6%
4X4 Block	84.3%	73.3%	69.6%

TABLE 11

Mean Percentage of Persons Satisfied with Home-School Relations by Schedule Type

Type of Schedule	Teachers	Students	Parents
Traditional	68.0%	78.8%	54.7%
A/B Block	61.3%	81.6%	61.4%
4X4 Block	59.3%	81.1%	62.6%

Consistently, across the three tables, teachers who are in schools with traditional schedules have higher levels of satisfaction than do teachers in schools with other types of schedules, while students and parents appear to have higher levels of satisfaction when their schools have block schedules.

TYPE OF SCHEDULE AND STUDENT ATTENDANCE

Mean student attendance rate is measured by dividing the average daily membership (ADM) for the first 135 days of the school year by the ADM for the same period. This calculation yields the percentage of students who attend school each day on average. The results are shown in table 12.

TABLE 12

Mean Student Attendance Rate by Schedule Type

Type of Schedule	Mean Student Attendance Rate
Traditional	95.2%
A/B Block	96.2%
4X4 Block	95.7%

Schools with A/B block schedules had higher student attendance rates than did schools with other schedules. The difference between the mean attendance rate at the A/B block schools and the mean at schools with 4X4 block schedules was equivalent to 1.6 days. The difference between the mean attendance at the A/B block schools and the mean rate at traditional schools was 2.5 days.

TYPE OF SCHEDULE AND TEACHER ATTENDANCE AND STABILITY

Teacher attendance data are collected in a survey each summer. The results of the survey show that the differences in teacher attendance rates are small. Attendance was higher in schools with traditional schedules, but the difference between schools with traditional schedules and the other types of schedule was less than half a day.

TABLE 13

Mean Teacher Attendance Rate by Schedule Type

Type of Schedule	Mean Teacher Attendance Rate
Traditional	95.9%
A/B Block	95.5%
4X4 Block	95.8%

Teacher stability is the percentage of teachers employed in 2001–02 who taught at the same school in 2000–01. Data are obtained by matching names on the Professional Certified Staff (PCS) file across the two-year period. Teacher stability was highest in schools with block schedules. The results appear in table 14.

TABLE 14
Mean Teacher Stability Rate by Schedule Type

Type of Schedule	Mean Teacher Stability Rate
Traditional	81.8%
A/B Block	84.3%
4X4 Block	84.0%

TYPE OF SCHEDULE AND STUDENT ENROLLMENT IN AP AND IB COURSES

Participation in Advanced Placement (AP) and International Baccalaureate (IB) courses is measured by the percentage of students who enroll in at least one of these courses. The results appear in table 15.

TABLE 15

Percentage of Students Who Enroll in Advanced Placement (AP) or International Baccalaureate (IB) Courses by Schedule Type

Type of Schedule	Percentage Enrolling in AP or IB Courses
Traditional	15%
A/B Block	16%
4X4 Block	11%

In schools with pure 4X4 block schedules, only 9 percent of the students enrolled in AP or IB courses. Many schools with 4X4 block schedules modify their schedules specifically to allow students in AP classes to receive instruction throughout the school year.

Reasons for the Choice of Schedule Type

A survey of high school principals was conducted in spring 2003 to determine why each school had chosen its particular schedule. (A copy of the survey instrument appears in appendix E.) Each principal was given a list of possible reasons for his or her school's choice of schedule type. Some schools had opted for the traditional schedule for the reasons that are typically advanced for that particular schedule type. Others schools had opted for block schedules for reasons that are often given for that particular schedule type. Of the 194 high schools surveyed, responses were received from 140 schools. Of these schools, 88 followed 4X4 block schedules, 30 had A/B block schedules, and 21 used traditional schedules. (The Governor's School for Science and Mathematics, which also responded, follows a "college model.")

Those principals whose schools follow 4X4 block schedules reported that these schedules were chosen mainly because they (1) provide students with more opportunity to earn the required number of Carnegie units, (2) provide students with more opportunity to take electives, (3) increase the amount of instructional time, and (4) make it easier for teaches to use their preferred instructional styles or methods.

Principals in schools with A/B block schedules gave similar responses. However, the fact that A/B block schedules spread instruction over a relatively long period of time was a more important factor in the choice of schedule than was the ease with which teachers were able to use their preferred instructional methods or styles.

Traditional schedules were favored by principals at the schools using them because they (1) resulted in an increased amount of instructional time, (2) spread instruction over a relatively long period of time, (3) were more appropriate to the attention spans of students, and (4) are said to result in higher academic achievement.

The reasons given for the different types of schedules were not surprising, the principals in each group citing strengths that are generally attributed to the schedule type. Of some interest is the fact that only among principals of schools with traditional schedules was "higher academic achievement" cited as one of the primary reasons for choice of schedule. These principals also listed students' attention span and amount of instructional time as factors that had influenced the choice of schedule.

The fact that all three groups of principals reported that their schedules resulted in increased instructional time may reflect the fact that block schedules include more instructional time in each class session while traditional schedules provide more instructional time over the course of the academic year. The structure of the survey did not allow further investigation of what the principals intended.

Conclusions

A. The majority of South Carolina high schools use 4X4 block schedules. A/B block schedules are the next most frequently used. A relatively small number of schools follow traditional schedules.

B. Student achievement, as measured by absolute ratings on school report cards, is higher in schools with traditional schedules. As measured by the improvement ratings on school report cards, achievement is higher in schools with A/B block schedules.

C. Teachers express higher levels of satisfaction with their schools if the schools follow traditional schedules. Students and parents appear to be more satisfied when schools follow one of the block schedules.

D. Student attendance, teacher attendance, and student enrollment in AP and IB courses are higher in schools with A/B block schedules.

E. Principals of schools with block schedules cite the increased opportunity for students to earn the units required for graduation, students' ability to choose a larger number of electives, an increased amount of instructional time, teachers' ability to use their preferred teaching styles (4X4), and the fact that instruction is spread over a long period of time (A/B) as reasons for their schedule choices.

F. Principals of schools with traditional schedules emphasize the amount of instructional time, students' attention spans, and the distribution of instruction over a relatively long period of time as reasons for their schedule choice. In addition, they assert that their schedules result in higher levels of academic achievement.

APPENDIX A

Types of Class Schedules by District and School, 2001–02 and 2002–03 School Years

District	School	Schedule for 2001–02 School Year	Schedule for 2002–03 School Year
Abbeville	Abbeville High	Pure 4X4	Traditional modified
Abbeville	Calhoun Falls High	Pure traditional	Pure traditional
Abbeville	Dixie High	Pure A/B	Pure traditional
Aiken	Silver Bluff High	Pure traditional	Pure traditional
Aiken	Aiken High/Aiken High Annex	Pure traditional	Pure traditional
Aiken	South Aiken High	Pure traditional	Pure traditional
Aiken	Midland Valley High	Pure traditional	Pure traditional
Aiken	North Augusta High	Pure traditional	Pure traditional
Aiken	Ridge Spring-Monetta High	Pure traditional	Pure traditional
Aiken	Wagener-Salley High	Pure traditional	Pure traditional
Allendale	Allendale-Fairfax High	Pure traditional	Pure traditional
Anderson 1	Palmetto High	A/B modified	A/B modified
Anderson 1	Wren High	Pure A/B	A/B modified
Anderson 2	Belton-Honea Path High	A/B modified	A/B modified
Anderson 3	Crescent High	4X4 modified	4X4 modified
Anderson 4	Pendleton High	4X4 modified	4X4 modified
Anderson 5	T. L. Hanna High	4X4 modified	4X4 modified
Anderson 5	Westside High	4X4 modified	4X4 modified
Bamberg 1	Bamberg-Ehrhardt High	4X4 modified	4X4 modified
Bamberg 2	Denmark-Olar High	Pure traditional	Pure 4X4
Barnwell 19	Blackville-Hilda High	Pure A/B	Pure A/B
Barnwell 29	Williston-Elko High	Pure A/B	Pure A/B
Barnwell 45	Barnwell High	A/B modified	A/B modified
Beaufort	Beaufort High	Pure A/B	Pure A/B
Beaufort	Hilton Head High	4X4 modified	4X4 modified
Beaufort	Battery Creek High	A/B modified	A/B modified
Berkeley	Stratford High	4X4 modified	4X4 modified
Berkeley	Berkeley High	4X4 modified	4X4 modified
Berkeley	Cross High	4X4 modified	4X4 modified
Berkeley	Goose Creek High	4X4 modified	4X4 modified
Berkeley	Hanahan High	4X4 modified	4X4 modified
Berkeley	Timberland High	4X4 modified	4X4 modified
Calhoun	Calhoun County High	Pure A/B	4X4 modified
Charleston	Baptist Hill High	Pure 4X4	Pure 4X4
Charleston	North Charleston High	A/B modified	A/B modified
Charleston	James Island High	4X4 modified	4X4 modified
Charleston	Burke High	4X4 modified	4X4 modified
Charleston	Garrett High	A/B modified	A/B modified
Charleston	Lincoln High	4X4 modified	4X4 modified
Charleston	Wando High	4X4 modified	4X4 modified
Charleston	St. John's High	Pure A/B	4X4 modified
Charleston	R. B. Stall High	Pure A/B	Traditional modified
Charleston	Charleston School of the Arts	Pure A/B	Pure A/B
Charleston	Academic Magnet High	Pure A/B	Pure A/B

Types of Class Schedules by District and School, 2001–02 and 2002–03 School Years

District	School	Schedule for 2001–02 School Year	Schedule for 2002–03 School Year
Charleston	Charlestowne Academy	Pure A/B	Pure 4X4
Charleston	West Ashley High	A/B modified	A/B modified
Cherokee	Blacksburg High	Pure traditional	Pure traditional
Cherokee	Gaffney Senior High	Pure traditional	Pure traditional
Chester	Chester Senior High	A/B modified	A/B modified
Chester	Great Falls Middle/High	Pure A/B	A/B modified
Chester	Lewisville High	Pure A/B	A/B modified
Chesterfield	Cheraw High	Pure 4X4	Pure 4X4
Chesterfield	Chesterfield High	Pure 4X4	Pure 4X4
Chesterfield	McBee High	4X4 modified	4X4 modified
Chesterfield	Central High	4X4 modified	4X4 modified
Clarendon 1	Scotts Branch High	Pure 4X4	Pure 4X4
Clarendon 2	Manning High	Pure 4X4	Pure 4X4
Clarendon 3	East Clarendon High	Pure 4X4	Pure 4X4
Colleton	Colleton County High	4X4 modified	4X4 modified
Darlington	Hartsville High	4X4 modified	4X4 modified
Darlington	Lamar High	4X4 modified	4X4 modified
Darlington	Darlington High	4X4 modified	4X4 modified
Darlington	Mayo High for Math, Science, and Technology	4X4 modified	4X4 modified
Dillon 1	Lake View High	Pure 4X4	Pure 4X4
Dillon 2	Dillon High	Pure 4X4	4X4 modified
Dillon 3	Latta High	4X4 modified	4X4 modified
Dorchester 2	Summerville High	Traditional modified	Traditional modified
Dorchester 2	Fort Dorchester High	4X4 modified	4X4 modified
Dorchester 4	Woodland High	Pure 4X4	4X4 modified
Edgefield	Strom Thurmond High	A/B modified	A/B modified
Fairfield	Fairfield Central High	Pure traditional	4X4 modified
Florence 1	South Florence High	A/B modified	A/B modified
Florence 1	Wilson High	4X4 modified	4X4 modified
Florence 1	West Florence High	Pure 4X4	4X4 modified
Florence 2	Hannah-Pamplico High	Pure 4X4	Pure 4X4
Florence 3	Lake City High	4X4 modified	Pure traditional
Florence 4	Timmonsville High	Pure 4X4	Pure 4X4
Florence 5	Johnsonville High	Pure 4X4	Pure 4X4
Georgetown	Andrews High	4X4 modified	4X4 modified
Georgetown	Carvers Bay	4X4 modified	4X4 modified
Georgetown	Georgetown High	Pure 4X4	Pure 4X4
Georgetown	Waccamaw High	Pure 4X4	4X4 modified
Greenville	Berea High	4X4 modified	4X4 modified
Greenville	Blue Ridge High	Pure 4X4	Pure 4X4
Greenville	Carolina High	Pure 4X4	Pure 4X4
Greenville	Eastside High	Pure traditional	Pure traditional
Greenville	Greenville High	4X4 modified	4X4 modified
Greenville	Greer High	Pure 4X4	4X4 modified
Greenville	Wade Hampton High	Pure 4X4	Pure 4X4

Types of Class Schedules by District and School, 2001–02 and 2002–03 School Years

District	School	Schedule for 2001–02 School Year	Schedule for 2002–03 School Year
Greenville	Hillcrest High	Pure 4X4	Pure 4X4
Greenville	J. L. Mann High	Pure A/B	A/B modified
Greenville	Mauldin High	4X4 modified	4X4 modified
Greenville	Riverside High	Pure traditional	Pure traditional
Greenville	Southside High	A/B modified	A/B modified
Greenville	Greenville Technical Charter	Traditional modified	Traditional modified
Greenville	Travelers Rest High	4X4 modified	4X4 modified
Greenville	Woodmont High	4X4 modified	4X4 modified
Greenwood 50	Emerald High	4X4 modified	4X4 modified
Greenwood 50	Greenwood High	4X4 modified	4X4 modified
Greenwood 51	Ware Shoals High	Pure traditional	Pure traditional
Greenwood 52	Ninety Six High	4X4 modified	4X4 modified
Hampton 1	Wade Hampton High	Pure traditional	Pure traditional
Hampton 2	Estill High	Pure 4X4	Pure 4X4
Horry	Aynor High	4X4 modified	4X4 modified
Horry	North Myrtle Beach High	4X4 modified	4X4 modified
Horry	Conway High	4X4 modified	4X4 modified
Horry	Green Sea Floyds High	4X4 modified	4X4 modified
Horry	Loris High	4X4 modified	4X4 modified
Horry	Myrtle Beach High	4X4 modified	4X4 modified
Horry	Socastee High	4X4 modified	4X4 modified
Horry	Carolina Forest Ed. Center	4X4 modified	4X4 modified
Horry	Academy for Arts, Science, Technology	A/B modified	A/B modified
Jasper	Jasper County High	A/B modified	A/B modified
Kershaw	North Central High	4X4 modified	4X4 modified
Kershaw	Camden High	Pure 4X4	Pure 4X4
Kershaw	Lugoff-Elgin High	Pure 4X4	Pure 4X4
Lancaster	Buford High	4X4 modified	4X4 modified
Lancaster	Indian Land High	Pure 4X4	Pure 4X4
Lancaster	Andrew Jackson High	4X4 modified	4X4 modified
Lancaster	Lancaster High	Pure 4X4	Pure 4X4
Laurens 55	Laurens District 55 High	4X4 modified	4X4 modified
Laurens 56	Clinton High	4X4 modified	4X4 modified
Lee	Lee Central High	4X4 modified	4X4 modified
Lexington 1	Gilbert High	4X4 modified	4X4 modified
Lexington 1	Lexington High	4X4 modified	4X4 modified
Lexington 1	Pelion High	Pure 4X4	Pure 4X4
Lexington 1	White Knoll High	4X4 modified	4X4 modified
Lexington 2	Airport High	4X4 modified	4X4 modified
Lexington 2	Brookland-Cayce High	4X4 modified	4X4 modified
Lexington 3	Batesburg-Leesville High	Pure 4X4	Pure 4X4
Lexington 4	Swansea High	4X4 modified	4X4 modified
Lexington 5	Chapin High	Pure A/B	Pure A/B
Lexington 5	Irmo High	A/B modified	A/B modified
Lexington 5	Dutch Fork High	A/B modified	A/B modified

Types of Class Schedules by District and School, 2001–02 and 2002–03 School Years

District	School	Schedule for 2001–02 School Year	Schedule for 2002–03 School Year
McCormick	McCormick High	Pure A/B	Pure traditional
Marion 1	Marion High	A/B modified	A/B modified
Marion 2	Mullins High	4X4 modified	4X4 modified
Marion 7	Creek Bridge High	4X4 modified	4X4 modified
Marlboro	Marlboro County High	Pure 4X4	Pure 4X4
Newberry	Newberry High	A/B modified	A/B modified
Newberry	Mid-Carolina High	Pure A/B	A/B modified
Newberry	Whitmire High	Pure A/B	Pure A/B
Oconee	Tamassee-Salem High	Pure A/B	Pure A/B
Oconee	Seneca Senior High	Pure A/B	Pure A/B
Oconee	Walhalla Senior High	A/B modified	A/B modified
Oconee	West-Oak Sr. High	Pure A/B	Pure A/B
Orangeburg 3	Holly Hill-Roberts High	Pure A/B	Pure traditional
Orangeburg 3	Elloree High	Pure A/B	Pure A/B
Orangeburg 4	Edisto High	A/B modified	A/B modified
Orangeburg 4	Branchville High	Pure A/B	Pure A/B
Orangeburg 4	Hunter-Kinard-Tyler High	Pure 4X4	Pure 4X4
Orangeburg 5	Bowman High	4X4 modified	4X4 modified
Orangeburg 5	Orangeburg-Wilkinson High	4X4 modified	4X4 modified
Orangeburg 5	North High	4X4 modified	4X4 modified
Pickens	D. W. Daniel High	A/B modified	A/B modified
Pickens	Easley High	A/B modified	A/B modified
Pickens	Liberty High	A/B modified	A/B modified
Pickens	Pickens Senior High	A/B modified	A/B modified
Richland 1	Columbia High	4X4 modified	4X4 modified
Richland 1	Dreher High	4X4 modified	4X4 modified
Richland 1	Eau Claire High	4X4 modified	Pure 4X4
Richland 1	A. C. Flora High	4X4 modified	4X4 modified
Richland 1	C. A. Johnson High	4X4 modified	4X4 modified
Richland 1	W. J. Keenan High	4X4 modified	4X4 modified
Richland 1	Lower Richland High	4X4 modified	4X4 modified
Richland 2	Spring Valley High	4X4 modified	4X4 modified
Richland 2	Richland Northeast High	4X4 modified	4X4 modified
Richland 2	Ridge View High	4X4 modified	4X4 modified
Saluda	Saluda High	Pure traditional	Pure traditional
Spartanburg 1	Chapman High	4X4 modified	4X4 modified
Spartanburg 1	Landrum High	Pure 4X4	Pure 4X4
Spartanburg 2	Boiling Springs High	4X4 modified	4X4 modified
Spartanburg 2	Chesnee High	4X4 modified	4X4 modified
Spartanburg 3	Broome High	4X4 modified	4X4 modified
Spartanburg 4	Woodruff High	Pure traditional	Pure traditional
Spartanburg 5	James F. Byrnes High	4X4 modified	4X4 modified
Spartanburg 6	Dorman High	Pure 4X4	Pure 4X4
Spartanburg 7	Spartanburg High	Pure traditional	Pure traditional
Sumter 2	Crestwood High	4X4 modified	4X4 modified
Sumter 2	Lakewood High	4X4 modified	4X4 modified

Types of Class Schedules by District and School, 2001–02 and 2002–03 School Years

District	School	Schedule for 2001–02 School Year	Schedule for 2002–03 School Year
Sumter 17	Sumter High	4X4 modified	4X4 modified
Union	Jonesville High	4X4 modified	4X4 modified
Union	Union Comprehensive High	Pure 4X4	Pure 4X4
Williamsburg	C. E. Murray High	Pure 4X4	4X4 modified
Williamsburg	Hemingway High	4X4 modified	4X4 modified
Williamsburg	Kingstree Senior High	Pure 4X4	Pure 4X4
York 1	York Comprehensive High	Pure 4X4	Pure 4X4
York 2	Clover High	Pure traditional	4X4 modified
York 3	Northwestern High	4X4 modified	4X4 modified
York 3	Rock Hill High	4X4 modified	4X4 modified
York 4	Fort Mill High	4X4 modified	4X4 modified
NA	Governor's School for Science and Mathematics	College model	College model
NA	Governor's School for the Arts and Humanities	Pure 4X4	Pure 4X4
NA	S.C. School for the Deaf and the Blind	Pure traditional	Pure traditional

APPENDIX B

Modifications to School Schedules, 2002–03 School Year

Type of Modification	N of Schools Implementing
4X4 BLOCK SCHEDULE	
Ninth-grade academy core courses meet daily all year.	8
English and math classes for low-performing students meet daily all year.	21
Mathematics for the Technologies 1 and 2 classes for low-performing students meet daily for 90 minutes.	10
Students who have failed the BSAP exit exam take math and English classes daily all year.	1
Students who have failed the BSAP exit exam take writing skills class daily all year.	1
English classes for low-performing ninth graders meet daily all year.	9
English and math classes for all students and grades meet 90 minutes daily all year.	1
English and math classes for ninth and tenth graders meet daily all year.	2
English 1 classes meet 90 minutes daily all year.	10
English 1 and reading classes meet A/B all year.	1
College Prep freshman English classes meet 90 minutes daily all year.	2
English and math classes for ninth graders meet 90 minutes daily all year.	5
English and math classes for ninth and tenth graders meet A/B all year.	1
English 2 classes for tenth graders meet 90 minutes daily all year.	10
Honors English for eleventh and twelfth graders meets A/B all year.	1
English 3 classes for eleventh graders meet daily all year.	1
English 1, 2, and 3 classes meet daily all year.	1
English 1 and 2 classes meet A/B all year.	1
English and history classes meet A/B all year.	3
Algebra 1 classes for low-performing students meet daily all year.	11
Algebra 1 classes for non-low-performing students meet daily all year.	31
Algebra 1 classes meet A/B all year.	1
Mathematics for the Technologies 1 classes meet (some for 45 minutes, some for 90 minutes) daily all year.	10
Algebra 2 classes meet daily all year.	1

Modifications to School Schedules, 2002–03 School Year

Type of Modification	N of Schools Implementing
Eleventh-grade math classes meet 50 minutes daily all year.	1
Honors Precalculus for eleventh-graders meets daily all year.	1
Tenth-grade math and science classes meet 45 minutes daily all year.	1
Classes for core courses other than math and English meet (daily or A/B) all year.	9
International Baccalaureate courses meet daily all year.	3
International Baccalaureate courses meet A/B all year.	4
Advanced Placement courses stretched over a year. (Some schools have related elective courses in the first block and AP courses in the second block, some have related elective courses meeting A/B with AP courses, and some have two related AP courses meeting A/B.)	57
A/B BLOCK SCHEDULE	
Ninth-grade academy core classes meet 45 to 50 minutes daily.	13
Tenth-grade academy core classes meet 50 minutes daily.	1
Algebra 1 classes for low-performing students meet daily.	3
Algebra 1 classes for non-low-performing students meet daily.	2
Mathematics for the Technologies 1 classes for low-performing students meet daily.	13
Mathematics for the Technologies 1 classes for non-low-performing students meet daily.	2
English classes for low-performing students (including BSAP exit exam failures) meet daily.	8
English classes for non-low-performing students (including Tech Prep) meet daily.	2
Physical science classes for all students meet daily.	1
Special education self-contained classes meet daily.	1
Advanced Placement classes (some or all) meet daily.	7
Core courses are on 4X4 block (at three schools, specifically to help repeaters catch up).	5
Academic classes for low-performing students meet 75 minutes daily.	1
Low-performing students in English 1 and Algebra 1 “restart” those courses and attend class every day instead of alternate days in order to catch up.	1

Modifications to School Schedules, 2002–03 School Year

Type of Modification	N of Schools Implementing
All students meet eight classes for 45 minutes each on Monday.	1
TRADITIONAL SCHEDULE	
Calculus meets on a 4X4 schedule.	1
Economics and government classes meet on 4X4 schedule for senior repeaters.	1
An embedded 90-minute block exists for low-performing ninth-grade English and math students.	1
Students attend classes in academic subjects for 90 minutes on Fridays A/B instead of the usual 45 to 50 minutes because the school has to use another school's lab, which is available only on Fridays.	1

APPENDIX C

Schools Locations: Definitions of Terms

Urban: Includes the classifications of midsize city and large town:

- midsize city—a central city of a consolidated metropolitan statistical area (CMSA) or a metropolitan statistical area (MSA) having a population smaller than 250,000
- large town—an incorporated place or U.S. Census Bureau–designated place with a population larger than or equal to 25,000 and located outside a CMSA or an MSA

Suburban: Includes the classifications of urban fringe of a large city and a midsize city:

- urban fringe of a large city—any incorporated place, U.S. Census Bureau–designated place, or nonplace territory within a CMSA or an MSA of a large city and defined as urban by the Census Bureau
- urban fringe of a midsize city—any incorporated place, U.S. Census Bureau–designated place, or nonplace territory within a CMSA or an MSA of a midsize city and defined as urban by the U.S. Census Bureau

Small town: An incorporated place or U.S. Census Bureau–designated place with population smaller than 25,000 and larger than or equal to 2,500 and located outside a CMSA or an MSA

Rural: Any incorporated place, U.S. Census Bureau–designated place, or nonplace territory defined as rural by the Census Bureau

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